

# Business Studio 5

organization design



# WHY IS DESIGN IMPORTANT?



Few would argue that in order to create or improve a complex technical system, one has to know something about its design. And they would also almost certainly agree that it is better to start with planning any improvements “on paper” than to rely on trial and error. These ideas become especially important when many people are involved in a project. Wouldn't it be great if all project participants saw the design of the system the same way?

Design is a key stage in the process of developing or improving any system. The more complex the system, the more important the design stage is, because the cost of fixing errors at the final stage of implementation is extremely high.

An organization – be it a company, a government body or a non-profit entity – functions in much the same way as any system, and an extremely complex system, thus, the design stage is just as important here.

Successful companies have long used design to ensure organizational development. When they feel the need for improvement, they start by implementing any potential changes into the model of their business architecture rather than attempting to experiment with

day-to-day activities. Stakeholders who are in charge of design, work together on a detailed model of their business architecture, seeing the exact same picture. This allows development projects to be a success quickly and effectively.

It should be said, however, that this is best suited for companies with a degree of maturity since dynamic project development demands simultaneous implementation of a host of different initiatives. This can represent a major challenge, and the key to success is making sure that managers are involved: as a bare minimum, each and every manager must be held accountable for improving the performance of their department; the ideal, however, would be to engage managers who are themselves fully-fledged business architects.

*Process maps don't require months of work to construct; several weeks is the norm. But this task does induce headaches, because it requires people to think across the organizational grain. It's not a picture of the organization, which is what people are used to seeing and drawing, but a depiction of the work that is being done. When it's finished, the process map should not surprise anyone. In fact, people may wonder why drawing it took as long as it did, since the finished map will be so easy to understand, even obvious.*

**Michael Hammer & James Champy,**  
«Reengineering the Corporation»

More than 2,800 companies have already chosen Business Studio to model their business processes and optimize management systems. Business Studio is used by small companies with as little as 30 employees, by major corporations, and by government agencies alike. 180+ universities and business schools use Business Studio as part of their educational programs.

# A TOOL FOR ORGANIZATIONAL DESIGN

The Business Studio system developed by “Umalogic” is a tool used to design an organization.

**Business Studio facilitates creation of a comprehensive business architecture model that includes:**

- Business requirements of company owners and strategies for their implementation.
- A conceptual activity model used to address key issues in respect of its structure.
- Detailed operational descriptions of the main business processes for a clear understanding of what needs to be done in the company and how.
- An organizational structure.
- Structures of information systems and data.

- Resources and means of production used in operational processes.

Models are used as a basis for making real changes to the organization itself, such as personnel recruitment and training, procurement of the necessary means of production, and introduction of information systems. Company activities are then monitored, allowing the cycle of organizational development to be repeated over and over again.

*Architecture enables you to accommodate complexity and change. If you don't have Enterprise Architecture, your enterprise is not going to be viable in an increasingly complex and changing external environment.*

**John Zachman,**  
consultant,  
CEO of Zachman International



## WHEN IS BUSINESS STUDIO USED?

### Business Studio is used to:

- Develop the company strategy.
- Standardize, optimize, and re-engineer business processes.
- Create a knowledge base on company structure and operation for employees.
- Implement a quality management system.
- Develop a KPI-based motivation system.
- Implement an information system.

## KEY USERS OF BUSINESS STUDIO

- Business architects
- Managers
- Business analysts
- Quality managers
- IT professionals
- And all company employees

*For CEOs today, it's all about achieving growth and efficiency through innovation. It's not about product innovation so much anymore as about innovating business models, processes, culture and management.*

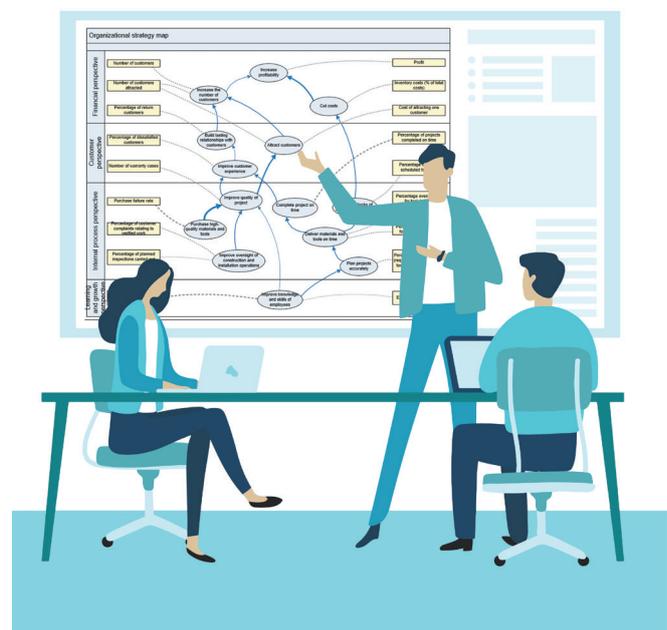
**Ginni Rometty,**  
ex-president and CEO of IBM

# ELABORATE BUSINESS REQUIREMENTS AND DEVELOPMENT STRATEGY

## DEVELOP STRATEGY MAPS AND A BALANCED SCORECARD

The objectives set for the company, either by its owners or by a leading executive, are the starting point for the creation of the company's objective tree. The objective tree provides a visual representation of how the goal is to be achieved. It also includes the objectives used to implement the requirements of other stakeholders like customers, regulatory bodies and company employees.

By describing strategy in a clear and concise manner, the likelihood of its successful implementation is significantly increased. The Balanced Scorecard (BSC) developed by Robert Kaplan and David Norton is considered to be the best tool to present the



company strategy. It is based on the development of strategic objectives and measures and on measuring degree of their achievement. Note, that not only financial objectives and measures should be defined but also those that reflect non-financial aspects of the company activity.

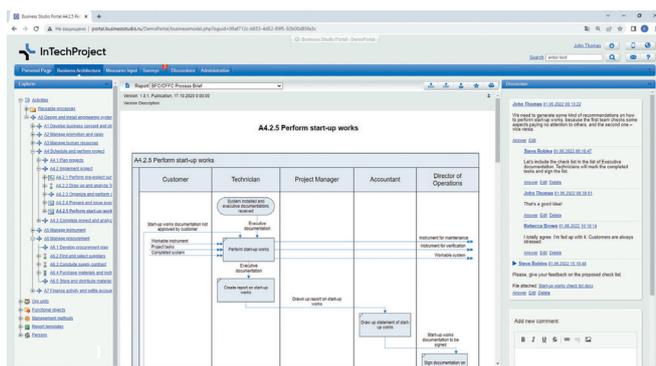
Business Studio makes it possible to formalize business strategy, present it in the form of an objective tree on a strategy map, and identify measures of objective achievement. For each and every measure, a target value, a target date are specified together with plan values for each period. Some employees are in charge of monitoring objective and measure achievement; others are in charge of entering measure values into a database. Business Studio allows to decompose the strategy map of the whole company into strategy maps of departments. Balanced Scorecard is successfully used in many companies when introducing a personnel motivation system. It allows you to link the employee's rewarding with his/her contribution to the achievement of the company's strategic goals.

## COLLECT AND DISCUSS EMPLOYEE PROPOSALS ON BUSINESS STUDIO PORTAL

Involving employees in improving the company performance is the key to its successful development. After all, only employees see imperfections and irrationalities of business processes in their daily activities.

Business Studio Portal allows all employees to make comments and suggestions, as well as to take part in discussing business processes and other elements of the company's business architecture. Notification of new messages is immediately sent out to all interested parties.

Employee proposals are analyzed and used to formulate new requirements to the business architecture.



*Employees are given the chance to help shape their company by participating in a company-wide communications program making suggestions on waste reduction, environmental improvement, customer satisfaction, quality improvement, and safety issues.*

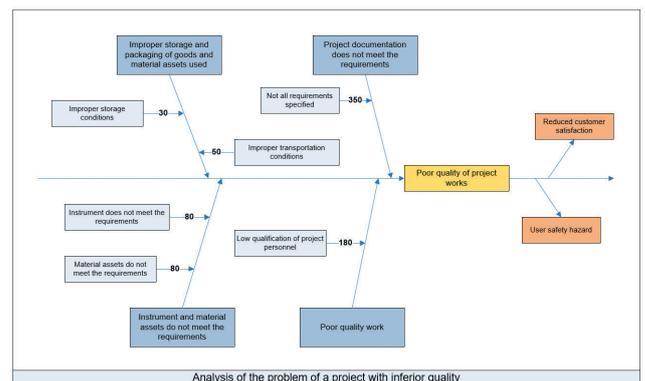
**Stephen Covey,**  
educator, businessman, keynote speaker,  
author of «The 7 Habits of Highly Effective  
People»

## FAILURE METHOD AND EFFECT ANALYSIS (FMEA)

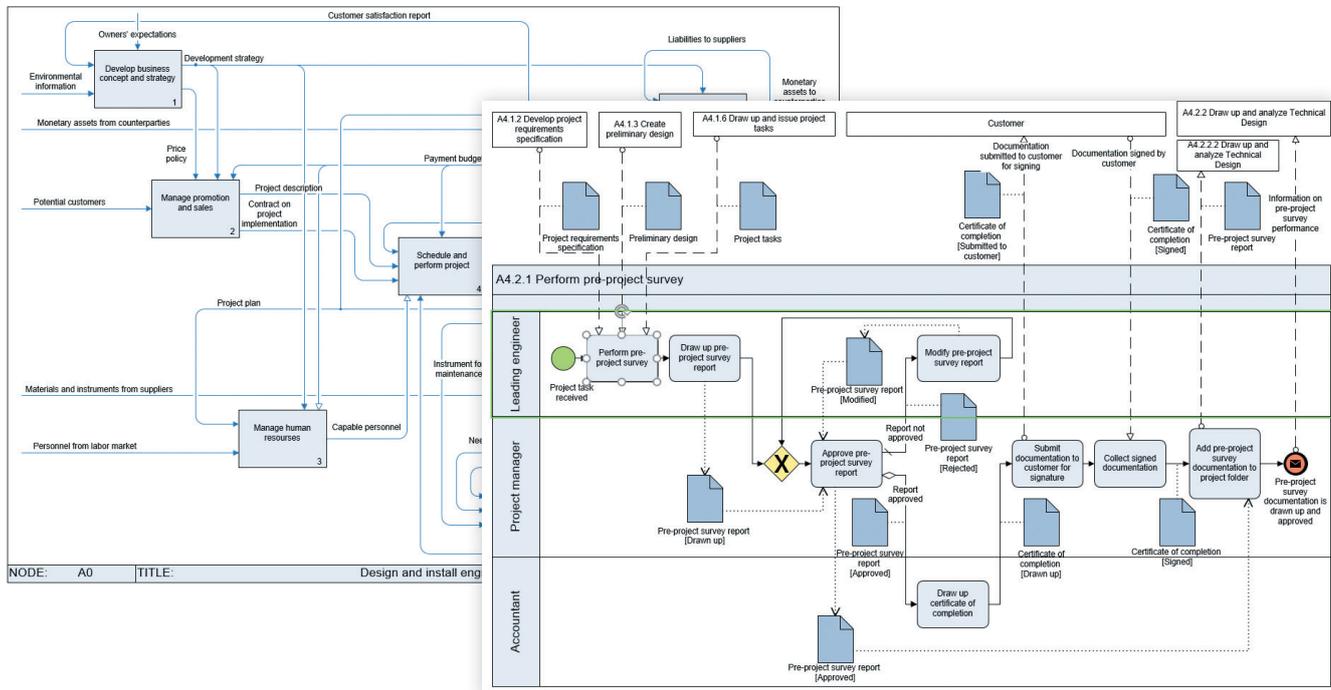
FMEA is a method used to analyze causes and effects of failures. Business Studio uses FMEA to analyze nonconformity identified within the system by:

- Describing relationships between the nonconformity, its causes and effects using the Ishikawa diagram. This greatly enhances understanding of the problem.
- Assessing significance and ranking effects of the nonconformity, its frequency and likelihood of detecting its causes.
- Ranking causes, developing measures to eliminate them, implementing these measures and reevaluating the problem after that.
- Generating documentation based on the results of the analysis.

Ishikawa diagram helps to analyze a nonconformity in detail through identifying all possible causes and formulating requirements to the business architecture as a result. Implementation of these requirements will eliminate the nonconformity.



# DESIGN BUSINESS ARCHITECTURE



## ACTIVITY DESIGN

Once the company strategy is decided upon, one should develop an activity model in pursuit of the company's goals.

Business Studio allows users to develop both conceptual models of company functions and detailed models of company business processes. To achieve this, it provides analysts with the most popular and convenient business modeling notations:

- IDEF0.
- Cross-functional Flowchart.
- BPMN 2.0.
- Basic Flowchart.
- EPC (Event-Driven Process Chain).

The IDEF0 notation is normally used to develop a hierarchical model of business functions, whilst the Cross-functional Flowchart, BPMN 2.0, Basic Flowchart and EPC notations are normally used to model the processes that will ultimately be performed by the company's employees. The notation can be changed when moving from the top to lower levels of the model.

According to the process approach principles, the following properties are defined: process owner, process actors, inputs and outputs, duration requirements, as well as a number of others. The combination of visual graphical notations and described process properties enables useful regulatory documentation to be produced.

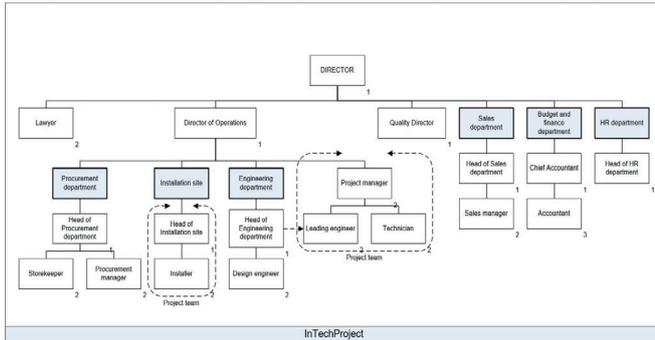
A set of KPIs can be defined for each business process. You can develop new KPIs or simply use the measures already present in the balanced scorecard.

As a result, you get Brief and Full Process Descriptions that are generated automatically and contain all the regulations for process performance.

*If you can't describe what you are doing as a process, you don't know what you're doing.*

**W. Edwards Deming,**  
*statistician, professor, author,  
 lecturer and management consultant*

# ORGANIZATIONAL STRUCTURE DESIGN



The organizational structure is the distribution of authority and employee responsibility. Business Studio facilitates creation of a hierarchical organizational structure both in the database repository and directly on the organizational chart, and relating org units with functions & processes they perform.

The role of org units in the company's organizational structure, their rights and responsibilities, their interaction with other organizational units and the measures used to assess their effectiveness are recorded in Department Descriptions, Job Descriptions, and the Responsibility Matrix.

Precisely how many employees with a particular position should be recruited to a given department is one of the most frequently asked questions. Business Studio's simulation function can be used to answer such questions based on the time properties of the given business process.

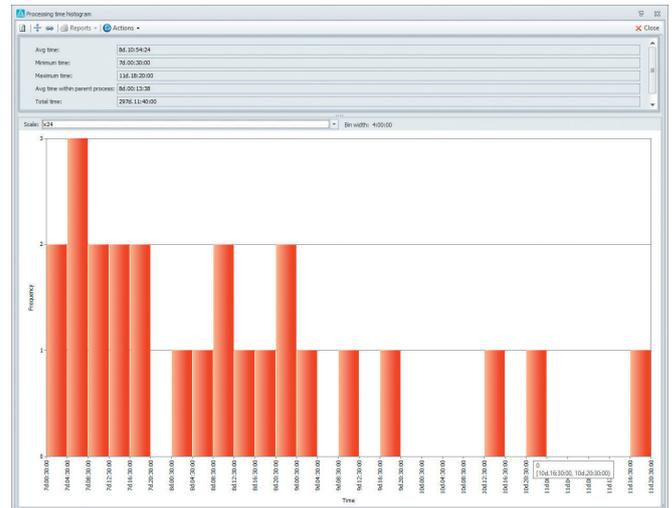
## SIMULATION

Companies often have to optimize their business activities. This is usually due to inefficiency in the business process, for example, long lead times or unacceptably high costs. Business Studio allows users to optimize the time and cost of processes by means of simulation and activity-based costing.

Business Studio simulates implementation of processes or groups of processes under conditions that closely resemble those encountered in real-life situations. As a result of activity-based costing and simulation, users are able to:

- Estimate the average values and spread of key process properties.
- Find the most expensive or time-consuming processes.

- Find the bottlenecks and overloaded resources causing operations to queue and delaying process implementation.
- Receive estimates of the requisite amount of resources.
- Find the resources with low load ratings.
- Analyze production and consumption of material resources.



Where the cost/time results are unacceptable, what-if analysis may be conducted. This may result in the re-designing of business processes or re-simulation following the addition of further resources. All statistical information obtained as a result of the simulation can be saved and viewed at any time, so the user should just select the best business process version.

*Process analysis is important, but in times like the present, when innovation is taking place so rapidly, and new possibilities seem to occur every month, thinking about how to change processes is also important. In my ideal company, each month a process team would sit down and consider how they might change or improve a half dozen different processes. Individuals would report possibilities, ranging from modest improvements to radical redesigns and the team would consider them, evaluate varying impacts, and then prioritize their work for the next month or quarter*

**Paul Harmon,**  
consultant, a founder and chief  
methodologist at BPTrends Associates

# APPLICATION ARCHITECTURE DESIGN AND DATA STRUCTURES

This is currently one of the most common ways to improve efficiency of business processes. Automation drastically reduces process execution time, increases the speed at which information is transferred between actors, and cuts down the number of errors.

When introducing information systems (IS), the main task is to ensure that they are well matched to the business processes of the company. Business Studio helps users ensure this is the case by allowing them to:

- Describe data structures.
- Create the architecture of the information system.
- Relate the functions of the information system to the business processes in which they are to be used.
- Establish requirements for information systems (partner solution in the Model Store).

Business Studio supports the CRUD (Create, Read, Update, Delete) method for describing data actions in business process operations. This allows generating

reports on the life cycle of functional objects.

The functions that have not yet been implemented or are missing from the information system receive special attributes. The Operational Concept report is automatically generated on the basis of the developed model. The report includes the following sections:

1. Descriptions of the business processes of the organization to be automated and the IS functions used therein.
2. A list of the requisite IS functionality.
3. A list of future IS user workstations.
4. A list of requisite IS-generated reports.

Where necessary, the given report is supplemented by other sections prior to their forwarding to the company's IT service.

*The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.*

**Bill Gates,**  
entrepreneur, co-founder of Microsoft  
Corporation

## NEW IN BUSINESS STUDIO 5

### **Model life cycle management**

Convenient ways to develop changes to the model and present them to the working group for approval. Easy implementation of the approved changes to the existing model. Notification of employees of changes in their areas of interest. Control of the employee notification and familiarization process.

### **Multi-language models**

Support of model development in multiple languages. The language can be changed both in the application interface and on Business Studio Portal. Convenient translation options: you can enter data in all languages at once or translate the model into other languages later.

### **New interactive Help function**

The new Help function uses the Business Studio application itself as an illustrative guide. The guide is used as a set of step-by-step instructions enabling users to read and immediately perform actions in the application without quitting the Help function.

### **Import/export via BPMN and/or XML**

Enables the BPMN format to be used to transfer process diagrams to the runtime environment (BPMS, ERP).

### **Improved usability and productivity**

Precise control of access rights and automatic data updates are used together to improve the interface and overall performance.

# IMPLEMENT CHANGES

## GENERATE REGULATORY DOCUMENTATION

In order to translate ideas embodied in the business architecture model into reality, they must be conveyed to employees in a clear and understandable format. This is achieved by generating a package of regulatory documents containing all the information required for employees to work effectively. Business Studio drastically reduces the complexity of this step by automatically generating the necessary regulatory documents and organizational reports:

- Strategy Map.
- Process Descriptions.
- Department Descriptions.
- Job Descriptions.
- Document Flow.

Documents are generated on the basis of the previously designed elements of the business architecture such as objectives, business processes, organizational structure, etc. Any change in the business architecture model is automatically reflected in the regulatory documents, ensuring that these documents are always kept up to date.

Standardized report templates used in Business Studio enable the user to design all documentation in a uniform style. Business Studio has the built-in Report Wizard, a user-friendly instrument for generating customized documents. The Report Wizard enables users to generate documents that match the customs and preferences of the company's employees.

It also supports generation of documents in the Microsoft Word, Excel, or HTML Publication formats. HTML Publication is a static website with a collection



## CREATE A KNOWLEDGE BASE ON COMPANY STRUCTURE AND OPERATION FOR EMPLOYEES

Business Studio Portal enables users to generate a comprehensive knowledge base containing regulatory documentation and all the information

necessary for employees to work effectively. Portal allows users to:

1. Ensure the company's knowledge base is kept up to date.
2. Automatically differentiate access rights of employees in accordance with their roles.

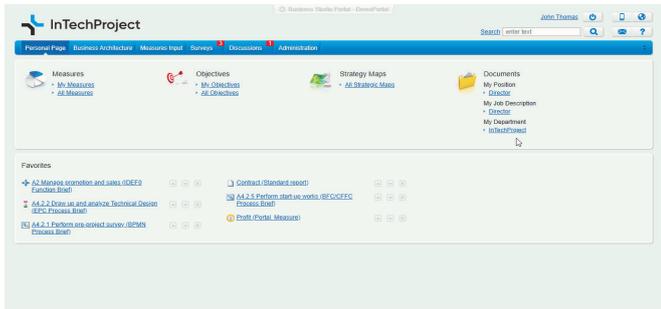
3. Access and work with information in a user-friendly manner.

Business Studio Portal is an online portal that allows employees to access the company’s knowledge base from any device anywhere in the world.

*People want guidance, not rhetoric; they need to know what the plan of action is and how it will be implemented. They want to be given responsibility to help solve the problem and the authority to act on it.*

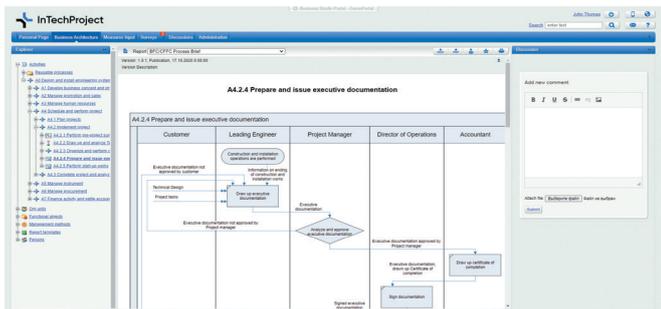
**Howard Schultz,**  
CEO of Starbucks

After successful authorization, employees are taken directly to their Personal Page. It contains all the necessary links for quick transition to the information and documents used by the employee: Job Description, Department Description, etc. The links on the Personal Page can be customized to suit the needs of the company, and employees can create their own Favorites section.



The Activity Model section allows employees to work with documents and reports posted on Portal. Hyperlinks are used for quick and easy movement between documents. However, employees see only those hyperlinks that they are authorized to use.

Portal grants access rights based on the employee’s role in the company (department manager, process owner, employee, project manager, etc.). Once new users are added to Portal, they are automatically



granted access to all the objects related to their corporate function.

Provision of a full-text search facility allows users to quickly find any information posted on Portal. It only offers users those search results which they are authorized to see.

## NOTIFY EMPLOYEES ABOUT RELEVANT INFO UPDATES

Companies usually have multiple development projects going on in parallel. Each of these projects can result in dozens, if not hundreds, of changes to important elements of the business architecture. At the same time, there may be thousands of employees in a company. How is it possible to ensure that each and every employee is aware of all the important changes affecting their area of interest?

Business Studio Portal manages precisely this task. When new versions of objects appear in the area of interest of an employee, Portal sends out a notification by email and informs them about the number of new objects in the Main Menu. Areas of interest are calculated on the basis of role information and can be flexibly configured.

Employees shall familiarize themselves with the new versions and confirm the receipt of information in the Survey section. Portal records the time of message receipt and allows managers to check whether all employees have familiarized themselves with the changes.

## EXPORT THE PROCESS DIAGRAMS TO BPMS AND ERP SYSTEMS

An important aspect of designing business processes using Business Studio is the ability to transfer BPMN process diagrams to a BPMS or ERP system. BPMS and ERP are modern information systems that allow you to manage execution of business processes in real time. Import of the ready diagrams into these systems allows to skip the setup stages and jump to process execution immediately. Information is imported (and exported) in the industry standard \*.bpmn format. Thus, with Business Studio it is possible to create a truly holistic management system from modeling and regulation to execution and control of business processes.

# MONITOR

## COLLECT MEASURE VALUES

Business Studio collects strategic measure and KPI values in the following ways:

- **Business Studio Portal**  
Portal allows plan and actual measure values to be entered by responsible employees in an Internet browser.
- **Import from other information systems**  
Business Studio supports connectors to ERP systems, such as SAP (partner solution in the Model Store). Additional connectors can also be developed using the OLE technology.
- **Microsoft Excel files**  
The system automatically emails report forms in the Microsoft Excel format to employees and then uploads the completed reports to the database. In addition, it is also possible to upload reports in the Microsoft Excel format generated by external information systems.

## MONITOR STRATEGY IMPLEMENTATION

When the degree of fulfillment for strategic objectives and measures are monitored regularly, it allows users to understand whether the company is moving in the right direction and with the right pace along the path of its strategy implementation.



Measures are monitored using Business Studio Portal. Portal allows the employees who are in charge of control of measure values, to view the current state of each measure of the company's activities with the help of the Status color-coding system. It glows green when the measure is operating within its specified limiting values, yellow when its values enter the so-called alarm zone, and red when the measure values fall into the critical zone. Users can also monitor the

state of the measure relative to the specified limits and trends, i.e. an increase or decrease by comparison to the previous measurement period.

Calculated measures can be decomposed to the lowest levels to discover which measure was the cause of the deviation. Portal also enables users to view the dynamics of measure values changes. Graphs are used to show the status of the measures in each measurement period against the background of the specified normal and alarming operation values. Visual representations of measure values dynamics enable users to predict whether a measure will be on track during the forthcoming measurement period or whether early preventive actions need to be taken.

Users can similarly monitor strategic objective achievement. Objective assessments are calculated automatically based on the values of the measure values associated with the objective. The strategy map is generally used to monitor objective achievement.

*However beautiful the strategy, you should occasionally look at the results.*

**Sir Winston Churchill,**  
*British statesman, Prime Minister of the United Kingdom from 1940 to 1945*

## COLLECT NONCONFORMITY MESSAGES

Nonconformity messages provide an early warning that something is not going according to plan. Typical sources of nonconformity messages are:

- Audits and activity monitoring.
- Complaints about product quality or the production process by an internal or external consumer.
- Employees.

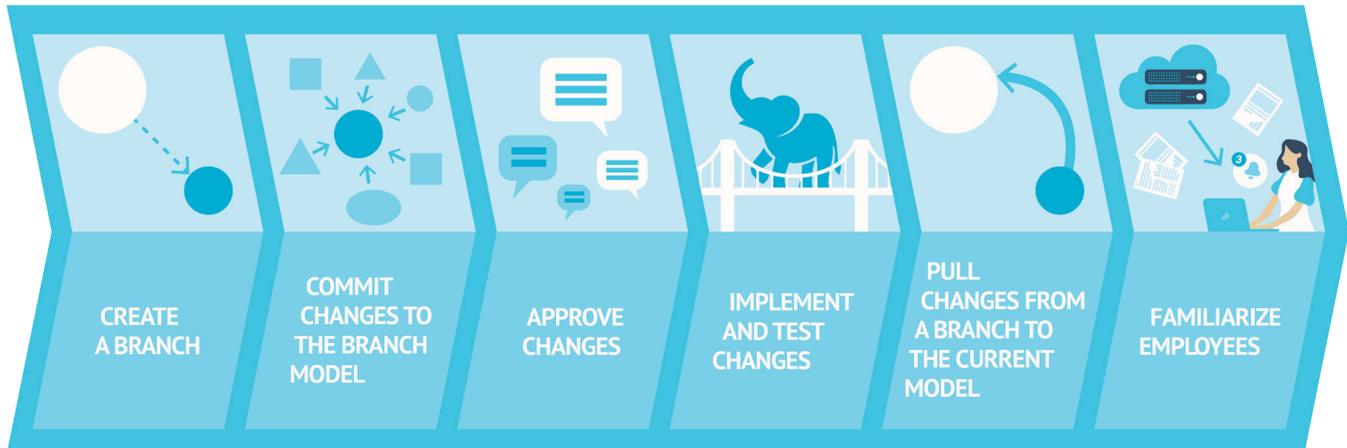
All such messages specify the element of the business architecture it has been sent from and the name of the employee who identified the problem. Nonconformity analysis is carried out using a Pareto diagram constructed according to the nonconformity messages received from the various elements of the business architecture.

When reporting such problems, actions that can be taken to minimize their effects may also be suggested. Nonconformity messages are recorded and added to

a list of similar system nonconformity, which can be used as the basis for subsequent smooth corrective actions: cause and effect analysis, estimation of its

consequences, and development of actions required to eliminate the cause.

## MODEL LIFE CYCLE MANAGEMENT



Once the initial stage of business architecture model development is complete, companies have to make further changes to it during the normal course of their business development. Organizational changes can affect multiple elements of the model at the same time, i.e. processes, positions, documents, the structure of the information system, measures, etc. In such cases, the entire batch of changes must be treated as a single unit, ensuring that no individual element is forgotten when passed to the working group for approval, when making changes according to comments, or during subsequent transfer to the current model.

Business Studio offers business architects and analysts a unique opportunity to manage the life cycle of a business architecture model. The branches mechanism tracks the changes made to the model in each project, prepares change options and sends them for approval to the project working group via Business Studio Portal.

Once changes to the company's business architecture are made, information is transferred from the working branch to the current model and the company begins operating under the new conditions. Business Studio Portal notifies the relevant company employees of any changes made to objects in their areas of interest.

## QUALITY MANAGEMENT SYSTEM SUPPORT

Implementation of a Quality Management System according to ISO standards is a guarantee that globally-acknowledged best management principles are in play. Business Studio allows users to develop, implement and prepare a management system for certification in compliance with the regulatory requirements of ISO standards (ISO 9001, ISO 14001, and others.)

In accordance with these standards, the management system should be process-based, undergo continuous improvement, and generally comply with the stated requirements. Business Studio implements the above principles by allowing users to:

- Establish the requirements and expectations of customers and other interested parties.
- Determine quality objectives.
- Determine the processes to be implemented in achieving company objectives and assign the employees responsible for their implementation.
- Measure the results and efficiency of processes.
- Check the condition of business processes using control charts.
- Plan internal audits, collect information on nonconformity, analyze the resulting data, and develop corrective and preventive actions.
- Generate Responsibility Matrices, Quality Manual, and other regulatory documentation and ensure these are kept up to date.

# POSITIVE EFFECTS OF USING BUSINESS STUDIO



*Business Studio makes the already established practice of organizational development the driving force behind your business since all company stakeholders are able to achieve their personal objectives.*

## OWNERS AND TOP MANAGERS

- Stable business development.
- High capitalization.
- Keeping the company's knowledge base.

Business architecture design is the key stage in the process of organizational development. It allows you to implement changes to your business right from the first attempt. Wave goodbye to trial and error with an approach that allows you to move much faster than your competitors!

The comprehensive digitalization of your company means an increase in the capitalization of your business. Digitalized companies are completely transparent to investors and will not collapse if, for example, key specialists decide to up and leave.

## MANAGERS

- Bonuses for the targets achieved.
- Reduction in overtime costs necessary for "extinguishing fires".
- Minimization of the onboarding period for new employees.
- Excellent manager qualifications.

The main task of every manager is to organize the activities of the department to achieve maximum efficiency and results. It is far more productive to devote time to designing or optimizing business processes than to be continually fixing problems because underlying issues remain unsolved. Departments that run like clockwork meet the objectives of both the branch manager and the company, the company gets the required result and the manager gets a bonus for achieving targets and demonstrating great qualifications.

Training new personnel no longer requires hours of time-consuming instruction and supervision by more experienced employees. Employees get all the information they need from the company knowledge base on Business Studio Portal.

## EMPLOYEES

- Orderly working conditions.
- Possibility to achieve results and bonuses associated with them.
- Participation in the company development.

Employees enjoy working in an orderly environment where they can focus on a clearly defined area of responsibility and a set of easily understandable duties. This is yet another positive, though largely unacknowledged, benefit of a well-designed business architecture. The presence of a business architecture model ensures that employees get information on

corporate objectives in a clear and understandable manner. Business Studio Portal automatically notifies employees of any changes in the documentation affecting their personal areas of interest.

For many, playing a part in the improvement of their company is vitally important: employees want to put forward suggestions and be heard. The business architecture discussion feature of Business Studio Portal provides employees with precisely this opportunity.

All this contributes to an atmosphere of productivity and professionalism in an organization and promotes a higher level of employee motivation.

## KEY BENEFITS OF BUSINESS STUDIO

### **Full support of organizational development cycle**

Business Studio provides comprehensive support of the organizational development cycle: from strategy development and business architecture design to organizational changes and monitoring of post-change operations.

### **Immediate results**

The main feature of Business Studio that differs it from other modeling systems, is its simplicity and convenience. The system has an intuitive interface; thus, it can be quickly mastered even by those architects who make their first steps in modeling business architecture. The time costs at the implementation stage are generally two or three times lower when compared to solutions offered by other vendors. In just a couple of months the company gets the knowledge base on business architecture including Job Instructions for employees and Operational Concepts for further automation.

### **Modeling notations used**

Business Studio uses the most popular modeling notations, i.e. those that are understandable to employees without additional training: IDEF0, Basic Flowchart, Cross-functional Flowchart, BPMN, and EPC.

### **Multi-language models**

Support of model development in multiple languages. The language can be changed both in the application interface and on Business Studio Portal. Convenient translation options: you can enter data in all languages at once or translate it into other languages later.

### **Model life cycle management**

Business Studio offers unique opportunities for preparing, coordinating and implementing changes to the model. Alert all employees about changes in their area of interest using Business Studio Portal.

### **Documents and reports with no size restrictions**

Business Studio was originally designed to present information from models in a simple visual format to a wide range of corporate stakeholders from managers and corporate employees to external contractors.

To achieve this, Business Studio is equipped with a powerful Report Wizard allowing to get and present data with no further programming and using all the formatting capabilities of MS Word.

### **Company knowledge base**

Business Studio Portal provides employees with the information they need to work and study, engages them in the process of improving the company performance, and enables them to access the corporate knowledge base from anywhere in the world. Portal supports various access rights, full-text search, and hyperlink document cross-referencing.

### **Easy system modification**

The MetaEdit module allows users to expand the structure of the data and to create convenient screen forms automatically without additional programming. The module enables the user to create new custom properties and repositories in the Business Studio data structure.

# WANT TO ACHIEVE OUTSTANDING RESULTS?

CONTACT US AND WE WILL SHOW YOU WHERE TO START!

- Case studies: samples of business architecture design developed by leading companies.
- Sample business architecture models from a range of different industries.
- Temporary Business Studio licenses to be used to test the system on pilot projects.



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